UNITED STATES DISTRICT COURT FOR THE EASTERN DISTRICT OF MICHIGAN

UNITED STATES OF AMERICA,

Plaintiff,

and

NATURAL RESOURCES DEFENSE COUNCIL, INC. AND SIERRA CLUB,

Intervenor-Plaintiffs,

V.

DTE ENERGY COMPANY AND DETROIT EDISON COMPANY,

Defendants.

Civil Action No. 2:10-cv-13101-BAF-RSW

Judge Bernard A. Friedman

Magistrate Judge R. Steven Whalen

DEFENDANTS' MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

Pursuant to Fed. R. Civ. P. 56, Defendants DTE Energy Company and Detroit Edison Company, by counsel, hereby move for summary judgment. For the reasons set forth in the accompanying memorandum of law, Defendants are entitled to judgment as a matter of law as to each of EPA's claims in this action.

In accordance with Loc. R. 7.1(a)(2), counsel for Defendants conferred with counsel for EPA, and explained the nature of this motion and its legal basis. EPA did not concur in the relief sought.

Respectfully submitted this 9th day of June 2011.

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CERTIFICATE OF SERVICE

I hereby certify that on June 9, 2011, the foregoing **DEFENDANTS' MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES** was served electronically only on the following attorneys of record in accordance with an agreement reached among the parties:

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DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES

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STATEMENT OF ISSUE PRESENTED

1. In 2002, EPA substantially reformed its rules governing NSR applicability. EPA confirmed that NSR is triggered only when the project in question causes an emissions increase and prescribed a common sense procedure for regulated entities to follow before undertaking construction of a project that the entity has concluded will not cause a significant increase in emissions. An operator like Detroit Edison that follows this procedure and submits the required notification to the regulating authority can commence construction without a permit in full compliance with the Clean Air Act and Michigan's NSR Rules. Should post-project emissions data, which the operator is required to monitor and report annually, show an increase, the source is subject to possible NSR permitting and enforcement at that time.

Detroit Edison complied with this procedure by submitting to MDEQ the required notification that it intended to undertake the three tube projects as part of the 2010 outage at Monroe Unit 2, and was thus allowed to commence work on these projects without an NSR permit.

Should judgment be entered in favor of Detroit Edison on EPA's claims that Detroit Edison violated the Clean Air Act and Michigan's rules by commencing construction on the 2010 outage projects without an NSR permit?

Defendants' Answer: Yes.

CONTROLLING OR OTHER APPROPRIATE AUTHORITY

Preamble to EPA's 1992 NSR Rules Amendments

57 Fed. Reg. 32,314 (July 21, 1992)

Preamble to EPA's 2002 NSR Rules Amendments

67 Fed. Reg. 80,186 (Dec. 31, 2002)

Relevant Michigan NSR Rules

MICH. ADMIN. CODE R. 336.2802(4)(a)(ii)

MICH. ADMIN. CODE R. 336.2802(4)(b)

MICH. ADMIN. CODE R. 336.2802(4)(c)

MICH. ADMIN. CODE R. 336.2818(3)(a)(i)-(iii)

MICH. ADMIN. CODE R. 336.2818(3)(b)

MICH. ADMIN. CODE R. 336.2818(3)(c)

MICH. ADMIN. CODE R. 336.2818(3)(d)

GLOSSARY OF ACRONYMS AND ABBREVIATIONS

CAA Clean Air Act

EPA United States Environmental Protection Agency

MDEQ Michigan Department of Environmental Quality

NAAQS National Ambient Air Quality Standards

NSR New Source Review

PSD Prevention of Significant Deterioration

PTE Potential to Emit

RMRR Routine Maintenance, Repair and Replacement

SIP State Implementation Plan

PRELIMINARY STATEMENT

This NSR enforcement case is the first of its kind — no court has yet addressed a challenge to recent projects governed by EPA's 2002 "NSR Reform Rules." Previous NSR enforcement cases have involved allegations that projects performed many years in the past were "major modifications" under NSR rules that EPA promulgated in 1980. The 1980 NSR rules provided no guidance as to what notice a regulated entity should provide or what records it should keep before undertaking a project that might implicate NSR, or what an entity should do to demonstrate compliance after the project was complete. As the Michigan Department of Environmental Quality ("MDEQ") has observed, determining applicability under these old rules was "[p]erhaps the most frustrating and complicated aspect" of the regulatory regime. As a result, the rules created "disincentives that discouraged sources from making the types of changes that improve operating efficiency, implement pollution prevention projects, and result in other environmentally beneficial changes." 67 Fed. Reg. 80,186, 80,192 (Dec. 31, 2002).

The 2002 NSR Reform Rules changed all that. In these new rules, EPA confirmed that NSR is triggered only when the project in question *causes* an emissions increase. More importantly here, the NSR Reform Rules (which Michigan has adopted) established two "source obligations" that prescribe a common sense procedure for complying with NSR. The first obligation applies before undertaking construction of a project. Under that procedure, before construction, an operator like Detroit Edison makes a projection of its actual emissions after a project, excludes emissions increases not caused by the project, and explains why it concluded that certain emissions increases could be excluded as unrelated to the project. The operator then

¹ MDEQ, Air Quality Division, *PSD Workbook: A Practical Guide to Prevention of Significant Deterioration* (Oct. 2003) at 2-1, *available at* http://www.deq.state.mi.us/aps/downloads/permits/PSD%20Workbook.pdf ("MDEQ PSD Workbook").

provides notice of its projection to the regulating authority (in this case, MDEQ). At that point, the rules make clear that the operator need not wait for any additional authorization from MDEQ. Rather, the operator that uses this procedure can commence construction without an NSR permit in full compliance with the Clean Air Act ("CAA" or "Act").

The second source obligation applies post-project. Under the NSR Reform Rules, for any project for which there is a reasonable possibility that the project will cause a significant emissions increase, the operator must monitor the emissions that could increase as a result of the project and calculate and maintain a record of annual emissions for five years (or, in one circumstance not at issue here, ten years). The operator then reports those emissions to the regulating authority annually after the end of each calendar year. At this point, the proof is in the pudding. If the actual data show an increase, then *and only then* will the project be evaluated to see if a "major modification" and a possible NSR violation has occurred.

The NSR Reform Rules thus introduced a healthy dose of common sense into NSR applicability. They give operators a defined process to follow pre-construction in order to undertake a project without the threat of violating NSR, if their emissions are projected not to increase as a result of the project. And they require the operator to create a record of compliance for five years thereafter, which both the operator and the permitting authority can review to determine with certainty whether emissions have actually increased due to the project.

The material facts under the NSR Reform Rules are not in dispute. As explained below, Defendants Detroit Edison Company and DTE Energy Company (collectively, "Detroit Edison" or "the Company")² complied with the source obligation of those before starting work on the

² Detroit Edison Company is a wholly owned subsidiary of the holding company, DTE Energy Company, and is the sole owner and operator of the Monroe Power Plant. Defendants (Continued)

three projects at issue here. It projected its post-construction emissions; it concluded that any projected post-construction increases in emissions were not the result of the projects; and it reported its findings to MDEQ. It thus could commence construction without obtaining an NSR permit. And Detroit Edison is now conducting the required post-project monitoring and will confirm when the time comes that none of these projects triggered NSR. If, as EPA seems to allege, Detroit Edison was wrong in its pre-project projection, the post-project emissions data that Detroit Edison is required to collect and report to MDEQ within 60 days of the end of each calendar year will show it (or, as Detroit Edison has projected, will *not* show it). At that point, if emissions have increased as a result of the projects at issue, Detroit Edison could be subject to post-construction NSR permitting and possibly an enforcement action. But as of the date that EPA filed its suit and as things stand today, Detroit Edison has neither "violated" nor "is in violation of" any requirement of the Act, as required by CAA § 113(b)(1). Accordingly, this enforcement action should be dismissed.

STATUTORY AND REGULATORY BACKGROUND

A brief review of the statutory background and regulatory history shows how the NSR Reform Rules changed and clarified source obligations under this program.³

I. New Source Programs under the CAA

Congress in 1970 directed EPA to develop National Ambient Air Quality Standards

deny that DTE Energy Company is an operator of Monroe Unit 2, and do not intend to waive this or any claims or defenses by defining the defendants as "Detroit Edison" here.

³ Detroit Edison and EPA have provided this context before in connection with EPA's motion for preliminary injunction, (Doc. No. 8), and this brief refers to the briefs filed by EPA and Detroit Edison in connection with that motion. Citations to EPA's Memorandum in Support of Plaintiff's Motion for Preliminary Injunction (Aug. 6, 2010) (which is part of Doc. No. 8) are to "EPA Mem." Citations to Defendants' Opposition to Plaintiff's Motion for Preliminary Injunction (Nov. 4, 2010) (Doc. No. 46) are to "Detroit Edison Opp."

("NAAQS") to protect the nation's public health with an adequate margin of safety. 42 U.S.C. § 7409. The States, in turn, were to develop SIPs setting source-by-source emissions limits to meet the NAAQS. *Id.* § 7410. Subsequently, a court ordered EPA to revise SIPs to prevent "significant deterioration" of air quality in areas meeting the NAAQS.

In 1977, Congress amended the CAA to codify the regulatory prevention of significant deterioration ("PSD") preconstruction permit program promulgated in 1974 and to create a Nonattainment NSR program (referred to collectively as the "NSR programs"). The NSR rules adopted in 1978 and amended in 1980 require a permit to construct a new major stationary source, or to undertake a "major modification" of an existing major stationary source. The NSR programs focus on emissions increases above "baseline" levels that add to existing pollution. *See* 42 U.S.C. §§ 7470(5), 7473, 7479(4). These increases must be *caused by* activities that are "physical change[s] in or change[s] in the method of operation" as defined under EPA's rules. *See* 40 C.F.R. § 52.21(b)(2).

As construed by the courts, the 1980 rules contemplated a preconstruction judgment of whether a "change" is "projected" to result in a "significant net increase" in emissions over baseline emissions, but imposed no pre- or post-construction reporting or recordkeeping requirements. ⁵ Moreover, the 1980 rules provided no guidance on how to project emissions. And they provided for post-construction NSR permitting in only one instance — where enforceable limitations on the emitting capacity of a source that were imposed to avoid a significant emissions increase that would trigger NSR are relaxed. In this instance, the 1980

⁴ Sierra Club v. Ruckelshaus, 344 F. Supp. 253 (D.D.C. 1972), aff'd per curiam 4 Env't Rep. Cas. (BNA) 1815 (D.C. Cir. 1972).

⁵ See, e.g., United States v. Cinergy Corp., 458 F.3d 705, 709 (7th Cir. 2006) ("[W]hat is required...is not prescience, but merely a reasonable estimate of the amount of additional emissions that the change will cause.").

rules impose a "source obligation" that "*[a]t such time*" as the enforceable limitation is relaxed, the source "becomes a . . . major modification" requiring an NSR permit. 40 C.F.R. § 52.21(r)(4) (emphasis added).

In 1992, EPA revised the 1980 rules to allow electric utilities that submit annual "post-change" emission reports to use a new emission projection technique, called "the 'representative actual annual emissions' methodology." *See* 57 Fed. Reg. 32,314, 32,325 (July 21, 1992). The rules also announced a "post-construction" PSD reporting requirement for sources opting to use this new emission projection approach. As EPA explained in the 1992 preamble in language similar to the "post-construction" NSR applicability requirement of the 1980 rules (i.e., 40 C.F.R. § 52.21(r)(4)): "If . . . the reviewing authority determines [based on post-project reporting] that the . . . emissions have in fact increased significantly over baseline . . . as a result of the change, the source would become subject to NSR requirements *at that time*." 57 Fed. Reg. at 32,325 (emphasis added).

The 1992 rules also provided guidance on the "causation" test for determining whether a "change" results in an increase. Specifically, in the preamble to the 1992 rules, EPA set forth two conditions under which a portion of a unit's post-change emissions was required to be excluded from the pre-project emission projection. The first of these is the "capable of accommodating" prong, which allows for the exclusion of emissions up to the level that the unit was capable of emitting but did not emit during the pertinent baseline period (*i.e.*, in the unit's "representative" pre-change condition). For this prong, EPA announced a "but for" causation standard. 57 Fed. Reg. at 32,326. The second condition is the "unrelated to the change" prong. Here, EPA explained that the causation test was whether the "change" was the "predominant cause" of the increase. *Id.* at 32,327.

In 2002, EPA amended *both* the 1980 rules *and* the 1992 rules to establish a new, more detailed "projected emissions" applicability test based on the 1992 rule for electric utilities that would apply to *all* categories of sources. The 2002 rules also affirmed the "causation" requirements in the 1992 rules, ⁶ established new requirements governing post-change emissions reporting, and included a "post-construction" NSR monitoring requirement like the 1992 rules.

The 2002 rules recognize that what a source owner might project to emit in the future is *always* the product of variable factors that, if managed consistent with the projection, will result in future emissions that conform to the projection. Accordingly, even if before a project one cannot exclude all "reasonable possibility" of an emissions increase because factors affecting a projection might change in the future, EPA created a new "source obligation," *see* 40 C.F.R. § 52.21(r)(6), that would allow construction to commence in compliance with the Act. Specifically, "before beginning actual construction," a company may choose to "make and record a projection of post-change emissions" that the project will not cause an emissions increase. 67 Fed. Reg. at 80,192. That projection must predict the "maximum annual rate" of emissions during the five years after the project, and must "exclude any emissions that the unit could have accommodated before the change and that are unrelated to the project." *Id.* Having made such a projection, the company must then provide notice (or keep records) of the projection before construction and submit "post-construction" emission reports. *Id.*

Because a source that performs this projection will be required to submit post-

⁶ See, e.g., 67 Fed. Reg. at 80,203 (explaining that the 2002 NSR Reform Rules include "the causation provision as originally contained in the [1992] amendments."); *id.* at 80,198 ("[W]e have decided to leave the [1992] rules intact in most respects.").

construction data on annual emissions,⁷ it is "not . . . required to obtain any kind of determination from the reviewing authority *before proceeding with construction*." *Id.* at 80,192 (emphasis added). And a company's projection of future emissions need not be based on enforceable limitations on capacity to emit a pollutant, like those referenced in 40 C.F.R. § 52.21(r)(4) of the 1980 rule. *Id.* at 80,197.

Critically, once the projection is filed with the permitting authority, construction may begin. But to ensure that emissions will not in fact increase as a result of a "change," the 2002 rules impose a second source obligation and provide that "if you use this procedure, you are required to track post-change annual emissions," and then report whether "post-change annual emissions exceed the baseline actual emissions by a significant amount." *Id.* at 80,192.

This new procedure relieves the regulated community of the frustrating uncertainties caused by the previous rules and makes real data, not highly variable factors underlying any emission projection, the measure of compliance. As EPA explained in response to comments on the 2002 rules:

We believe that most sources should be able to adequately project the emissions increases that will result from the physical and operational changes that they choose to make. If for some reason the projection is not accurate, the required tracking of emissions ... following the changes will determine whether a significant emissions increase *has actually occurred*. Where the change is found to be a major modification, despite the projections made by the source, the reviewing authority will be expected to proceed with the process of subjecting the source to the major NSR requirements.

⁷ As EPA has explained, it does "not believe that every modification," including even those that involve "added capacity" or an "increase in the PTE [potential to emit]," is "intended for full use of that new capacity or PTE," in that "[s]uch actions could well be intended to enhance current operations without resulting in increased production or operation." *Id.* at 80,203.

U.S. EPA, *Technical Support Document for the Prevention of Significant Deterioration and Nonattainment Area New Source Review Regulations* (Nov. 2002) at I-5-28, *available at* http://www.epa.gov/NSR/actions.html#2002 (emphasis added). If despite the pre-project projection, actual post-project data shows a significant increase that "results" from the change, then a post-construction NSR permit is required at that time, and the source owner might also be subject to an enforcement action.⁸

II. The Michigan NSR Rules

Michigan has adopted these NSR Reform Rules into its SIP for PSD. MICH. ADMIN. CODE R. 336.2801, *et seq.* ⁹ A "major modification" under the Michigan NSR program is defined as (i) a "[p]hysical change in or change in the method of operation of a major stationary source" that (ii) "result[s] in" (*i.e.*, causes) (iii) a "significant emissions increase." MICH. ADMIN. CODE R. 336.2801(aa)(i). In the provision governing "[a]pplicability" of the program to "project[s] at an existing major stationary source," the Michigan NSR rules state that "[t]his part applies to … major modifications … in the following manner":

A project *is* a major modification for a regulated new source review pollutant if it *causes* both of the following types of emissions increases:

- (i) A significant emissions increase.
- (ii) A significant net emissions increase.

⁸ The 2002 NSR Reform Rules were upheld by the D.C. Circuit in *New York v. U.S. EPA*, 413 F.3d 3 (D.C. Cir. 2005).

⁹ Because Michigan's SIP for "nonattainment" NSR has not yet been approved by EPA, the NSR Reform Rules for nonattainment areas in the state apply through Appendix S to 40 C.F.R. pt. 51 (2008). Because the PSD rules, which have been approved, are identical in all relevant respects to the nonattainment NSR rules, they will hereafter be referred to collectively as the "Michigan NSR rules."

See id. at R. 336.2802(4)(a) (emphasis added). ¹⁰ By contrast, "a project is **not** a major modification *if it does not cause a significant emissions increase*." *Id.* (emphases added). ¹¹

A. Pre-project emission projections

Because NSR establishes a preconstruction permitting program, the Michigan NSR rules contain provisions that the owner/operator of an existing source is to use prior to undertaking a proposed activity. Those provisions require owners to project whether an activity that might be a "project" will cause an emissions increase. Under these rules, the "procedure for calculating whether a significant emissions increase *will occur* depends upon the type of emissions units being modified." *See* MICH. ADMIN. CODE R. 336.2802(4)(b) (emphasis added). ¹² For "projects that only involve existing emissions units,"

[a] significant emissions increase of a regulated new source review pollutant is *projected to occur* if the sum of the difference between the *projected actual emissions* and the baseline actual emissions for each existing emissions unit, equals or exceeds the significant amount for that pollutant.

¹⁰ A "net emissions increase" calculation takes into account both the "increase in emissions from a particular change or change in the method of operation" at the major stationary source and "[a]ny other increases and decreases in actual emissions" at the source that are "contemporaneous with the particular" and which are "otherwise creditable." See MICH. ADMIN. CODE R. 336.2801(ee)(i).

The term "project" under MICH. ADMIN. CODE R. 336.2801(kk) is a regulatory term-of-art defined to mean a "physical change in, or change in the method of operation of, an existing major stationary source." The Michigan NSR rules provide that a "[p]hysical change or change in the method of operation *shall not include* . . . [r]outine maintenance, repair, and replacement." *See* MICH. ADMIN. CODE R. 336.2801(aa)(iii)(A) (emphasis added). As Detroit Edison has previously explained (*see* Detroit Edison Opp. at 10-16), the Monroe repairs were "routine maintenance, repair, and replacement." For purposes of this motion only, however, Detroit Edison assumes that the Monroe work performed at Monroe Unit 2 constituted "projects" within the meaning of the Michigan Administrative Code.

¹² This language from the Michigan SIP parallels that of "applicability" provisions of the federal NSR rules set forth at 40 C.F.R. § 52.21(a)(2)(iv)(b) ("The procedure for calculating (*before beginning actual construction*) whether a significant emissions increase . . . will occur depends upon the type of emissions units being modified" (emphasis added)).

MICH. ADMIN. CODE R. 336.2802(4)(c) (emphases added).

"Projected actual emissions" is, in turn, defined as the "maximum annual rate, in tons per year, at which an existing emissions unit *is projected to emit*" a regulated PSD pollutant "in any 1 of the 5 years (12-month period) following the date the unit resumes regular operation after the project." *See* MICH. ADMIN. CODE R. at 336.2801(ll)(i) (emphasis added). In determining these projected actual emissions "*before beginning actual construction*, the owner or operator . . . shall . . . [c]onsider all relevant information," including but not limited to the "company's own representations," the "company's expected business activity," and the "company's filings with the state or federal regulatory authorities." MICH. ADMIN. CODE R. 336.2801(ll)(ii)(A) (emphasis added).

Reflecting the causation requirement of the statute and regulations, ¹³ the "projected actual emissions" rule requires that the owner/operator "*shall . . . [e]xclude*, in calculating any increase in emissions that results from the particular project," that "portion of the unit's emissions following the project" that the unit "could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project," including "any increased utilization due to product demand growth." MICH. ADMIN. CODE R. 336.2801(ll)(ii)(C) (emphasis added).

Where the "projected actual" emissions test is used *and* there is a "reasonable possibility" that an emissions increase could be projected after the project, ¹⁴ the Michigan NSR rules require

¹³ See 67 Fed. Reg. at 80,203 ("Both the statute and the implementing regulations indicate that there should be a causal link between the proposed change and any post-change increase in emissions.").

¹⁴ Under the Michigan NSR rules, a "reasonable possibility" occurs when the source calculates either (i) "[a] projected actual emissions increase of at least 50% of the amount that is (Continued)

that "[b]efore beginning actual construction of the project, the owner or operator shall document and maintain a record" that contains the "projected actual emissions, the amount of emissions excluded under R 336.2801(ll)(ii)(C) and an explanation for why such amount was excluded," as well as a "description of the project" and an "[i]dentification of the emissions unit or units whose emissions of a regulated new major source review pollutant may be affected by the project." *See* MICH. ADMIN. CODE R. 336.2818(3)(a)(i)-(iii). "[B]efore beginning actual construction, the owner or operator shall provide a copy" of the foregoing information to MDEQ. *Id.* at R. 336.2818(3)(b). The rules make clear, however, that the owner or operator submitting such information is "*not require[d]*... to obtain any determination from [MDEQ] before beginning actual construction." *Id.* (emphasis added). So once the pre-project notification is submitted, construction may lawfully begin.

Reflecting EPA's rules, the Michigan NSR rules confirm that they "do[] not require ... any determination from the department [regarding the project notification] before beginning actual construction," because, under the NSR Reform Rules, *actual* annual emissions after the project are the test of the projection's accuracy. *Id*.

B. Post-project Monitoring and Reporting

The Michigan NSR rules state unequivocally that a "project is *not* a major modification if it *does not cause* a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a)(ii)

a significant emissions increase, as defined in R 336.2801(rr)," or (ii) "[a] projected actual emissions increase" would occur if one included "the amount of emissions excluded under R 336.2801(ll)(ii)(C)" (i.e., if one included emissions increases that are projected *not* to be caused by the project). MICH. ADMIN. CODE R. 336.2818(3)(f). In this case, because there is a "reasonable possibility" of an increase if one includes "the amount of emissions excluded under R 336.2801(ll)(ii)(C)" that are projected *not* to be caused by the project, the Company filed a pre-project notification presenting the information required by the Michigan Code. Ex. 1, Declaration of Skiles W. Boyd ("Boyd Decl.") ¶¶ 15, 17 & Ex. 2.

(emphasis added). To enable permitting authorities to determine whether a project for which a pre-project notification has been filed in fact has caused a "significant emissions increase," the NSR rules contain post-project actual annual emissions monitoring and reporting requirements.

The rules state that, "[f]ollowing resumption of regular operations" after the project, the owner or operator must "monitor the emissions . . . that could increase as a result of the project," and "calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years." *See* MICH. ADMIN. CODE R. 336.2818(3)(c). In the specific case of an "existing electric utility steam generating unit," the owner/operator "shall submit a report" to the MDEQ "within 60 days after the end of each year . . . setting out the unit's annual emissions" for that year. MICH. ADMIN. CODE R. 336.2818(3)(d). The permitting authority then uses this post-project data to determine whether a project has actually caused — or has not caused — a significant actual annual emissions increase. *See* MICH. ADMIN. CODE. R. 336.2802(4)(a)(ii) ("The project *is not* a major modification *if it does not cause a significant emissions increase.*" (emphasis added)).

Critically, it is this post-project data — not the pre-project projection — that determines whether NSR has been triggered. As the Michigan NSR rules explain, "*[r]egardless of preconstruction projections*," a "major modification" depends on whether "the project causes a significant emissions increase and a significant net emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(b) (emphasis added). In other words, under the Michigan NSR rules, actual emissions after a project always trump pre-construction projected emissions in determining whether a project for which no emissions increase due to the project is projected is nonetheless a

¹⁵ If the project increases the unit's design capacity or "potential to emit," the reporting period is 10 years. 67 Fed. Reg. at 80,203.

"major modification." Post-project monitoring and reporting gives MDEQ the data necessary to make this call. As EPA explained in 1992, it "provide[s] a reasonable means of determining whether a significant increase . . . resulting from a proposed change . . . occurs within 5 years [or 10 years] following the change." 57 Fed. Reg. at 32,325. So if, despite the pre-project notice of no increase due to the project, the reviewing authority "determines that the source's emissions have *in fact* increased significantly over baseline levels as a result of the change, the source would become subject to NSR requirements *at that time*." *Id.* (emphases added). 16

Thus, under the Michigan SIP, where the pre-construction notice projects no significant increase caused by the project, the NSR permit requirement can only be triggered by a post-construction significant increase in actual annual emissions (not a new, retrospective "projection") that is demonstrated to be caused by the project. Furthermore, even in the event of a reported post-project annual increase, MDEQ has made clear that such an increase "do[es] not automatically constitute a violation of PSD." MDEQ PSD Workbook at 4-6. At that time, "[t]he submittal of this report will only trigger an evaluation of the circumstances to determine *if* a PSD violation may have occurred." *Id.* at 4-7 (emphasis added).

STATEMENT OF UNDISPUTED MATERIAL FACTS

Like every other electric utility in the country, Detroit Edison regularly performs maintenance, repair and replacement activities to ensure that its units run efficiently and safely, without interruption and without injury to its workforce. Like every other utility in the country,

¹⁶ Further confirmation of this feature of the new rules is EPA's explanation that it is unnecessary to treat pre-project projections as enforceable emissions limits. "The Act provides ample authority to enforce the major NSR requirements *if* your . . . change results in a significant net emissions increase." 67 Fed. Reg. at 80,204 (emphasis added). Thus, if post-project annual emissions "differ[] from your projection of post-change emissions . . . then you must report this increase." *Id.* at 80,197. This, EPA has said, "[e]nsures [t]hat . . . [a] project is not a major modification." *Id.*

Detroit Edison periodically removes its units from service for up to three months to perform this maintenance work. Boyd Decl. ¶ 12. Before starting such work, Detroit Edison discusses the work with MDEQ and submits to MDEQ a planned outage notification. Boyd Decl. ¶ 15.

With respect to the economizer, pendant reheater and waterwall projects performed at Monroe Unit 2 starting in March 2010, Detroit Edison submitted to MDEQ an outage notification on March 12, 2010, before commencing work on the projects. Boyd Decl. ¶ 17. That notice (i) addressed each of the information requirements of the Michigan NSR rules, *see* MICH. ADMIN. CODE R. 336.2818(3)(a); (ii) explained why the repairs were projects within the NSR "routine maintenance, repair, and replacement" exclusion; and (iii) explained why, in any event, the projects would not result in any "significant emissions increase." *Id.*; Boyd Decl. Ex. 2 ("Notification Letter"). MDEQ did not question Detroit Edison's notification, either then or since that time. Boyd Decl. ¶ 17. The projects started on March 13, 2010, and concluded on June 20, 2010. *Id.* ¶ 18. Monroe Unit 2 resumed regular operations later that summer.

Less than one year has passed since Monroe Unit 2 resumed operations following the project, so Detroit Edison has not yet submitted a post-construction report on actual emissions as required by MICH. ADMIN. CODE R. 336.2818(3)(d). But Monroe Unit 2 has not exceeded preproject emissions on an annualized basis since it resumed operations. Ex. 2, Declaration of Gordon P. Usitalo at ¶ 3.

¹⁷ Detroit Edison's submittal was made in compliance with the provisions of MICH. ADMIN. CODE R. 336.2818(3)(b), described *supra*, which require only that the formal notification be made "before beginning actual construction." As Detroit Edison regularly communicates with MDEQ, however, the agency was aware of the Monroe Unit 2 Project well before the Company submitted the Notification Letter. Boyd Decl. at ¶¶ 15, 17.

ARGUMENT

The Michigan NSR rules establish a "source obligation" (i) to provide a pre-project projection that the project will *not cause* post-project emissions to increase above baseline levels based on "all relevant information" including "the company's own representations;" and (ii) to conduct post-project monitoring and reporting to confirm the validity of the pre-project projection. MICH. ADMIN. CODE. R. 336.2818(3), R. 336.2801(II)(ii)(A). According to these rules, "[t]he project is *not a major modification if it does not cause* a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a) (emphases added).

Detroit Edison submitted the Notification Letter before starting work on the tube projects performed during the 2010 outage. The first annual report to MDEQ required by the rules will not be submitted until early 2012, but based on monitoring performed to date and consistent with this Court's Order of August 30, 2010 (Doc. No. 29), emissions have not increased above baseline levels. Because a "significant emissions increase" has not occurred, much less an increase caused by the projects, the projects are not "major modifications."

I. Detroit Edison Complied With the Requirements of the Michigan NSR Rules Before Starting the Projects.

As explained above, the Michigan NSR rules require operators like Detroit Edison to file a pre-project notification that explains whether the project is expected to cause an emissions increase. That notification must include "the projected actual emissions, the amount of emissions excluded ... and an explanation for why such amount was excluded." MICH. ADMIN. CODE R. 336.2818(3)(a)(iii). In determining whether the project is projected to cause an actual emissions increase, the operator must consider "all relevant information, including ... historical operational data, the company's own representations ... [and] the company's [regulatory] filings." MICH. ADMIN. CODE R. 336.2801(ll)(ii)(A) (emphasis added). The "source obligation"

is to "provide a copy of the information required by subdivision (a)" to MDEQ "before beginning actual construction." *Id.* The Michigan NSR rules "do[] not require the owner or operator of the unit to obtain any determination from the department before beginning actual construction." MICH. ADMIN. CODE R. 336.2818(3)(b).

Before starting work on the 2010 outage projects, Detroit Edison consulted with MDEQ and filed a notification that provided the information required by MICH. ADMIN. CODE R. 336.2818(3)(a) of the Michigan PSD rules. *See* Boyd Decl. ¶¶ 15, 17. This project notification (i) described the projects; (ii) identified the affected emissions unit; and (iii) described "the applicability test used to determine that the project is not a major modification." MICH. ADMIN. CODE R. 336.2818(3)(a); *see* Boyd Decl. ¶ 17, Ex. 2. The notice also addressed baseline actual emissions, projected actual emissions, excluded emissions, and the reasons for excluding those emissions. In particular, the notice explained that:

"Projected actual emissions," as defined in MAR 1801(II), are also shown in Table 1, along with a comparison of projected and baseline actual emissions. This comparison shows that the projects will not result in an emissions increase As required under the new rules we then excluded from the PROMOD projections "...that portion of the unit's emissions following the project that an existing unit could have accommodated ... and that are also unrelated to the particular project," including increases due to demand and market conditions or fuel quality per MAR 1801(II)(ii)(C). (See Table 1)

[E]missions and operations fluctuate year-to-year due to market conditions and in any individual year could very well exceed baseline levels. Obviously, since the baseline represents a 2-year average, one of those years was above the baseline and one below. At some point in the future, baseline levels may be exceeded again, but not as a result of this outage. Future unit utilization is also a function of expected electricity market conditions. Many factors influence market demand – weather, availability of other units, transmission limitations, electric system security, etc. Moreover, fuel quality could change. As mentioned above, the Michigan air rules direct one to exclude from projected actual emissions ". . .

that portion of the unit's emissions following the project that an existing unit could have accommodated . . . and that are also unrelated to the particular project," including increases due to demand growth or fuel quality changes per MAR 1801(ll)(ii)(C).

Boyd Decl. Ex. 2 at 2.

In other words, Detroit Edison "projected" that the projects would not cause emissions to increase and thus were not "major modifications." Because it complied with the pre-project source notification obligation of the Michigan NSR rules, Detroit Edison could begin actual construction of the projects in full compliance with the Act. Detroit Edison can be subject to NSR permitting and possible enforcement in the future as to the 2010 projects *only if* actual annual emissions increase and *only if* the actual increase was "caused" by the projects. Because it has met the pre-project source obligation, the Company has neither "violated" nor "is in violation of" the applicable NSR rules, as required by § 113(b)(1). *See* 42 U.S.C. § 7413(b)(1).

II. EPA's Claims Are Based on Inappropriate Challenges to Detroit Edison's Pre-Project Projections, Not Actual Post-Project Data as Required by Michigan's Rules.

Monroe Unit 2 resumed regular operations following the projects in late summer 2010. The first calendar year for which the unit's annual emissions following the Projects can be calculated therefore is calendar year 2011. In accordance with MDEQ's rules, Detroit Edison will file its report describing emissions "in tons per year on a calendar year basis" within 60 days after the end of calendar year 2011. MICH. ADMIN. CODE R. 336.2818(3)(c), (d). That report will be the first opportunity for EPA or MDEQ to measure whether the projects caused a significant net emissions increase and thus constituted "major modifications." If that report confirms Detroit Edison's projection, it will verify that "[t]he project is not a major modification ... [because] it does not cause a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a)(ii). If that report does *not* confirm the Company's projection of no significant

increase caused by the projects, the projects will become subject to NSR — and possibly subject to a *future* and *new* enforcement action — *at that time*. See 57 Fed. Reg. at 32,325.

Until that time, however, the projects are not "major modifications" under the plain language of the Michigan NSR rules, and Detroit Edison is in full compliance with the Act. As a result, this action under section 113(b) of the Act cannot be maintained, because section 113(b) only authorizes enforcement only where an owner "has violated" or "is in violation" of a CAA requirement. 42 U.S.C. § 7413(b).

Rather than wait to see what actual emissions data show, as required by the Michigan NSR rules, EPA bases its Complaint on a hypothetical, post-project calculation. According to EPA, if Detroit Edison had used the projection methodology of EPA's experts — a methodology that is not provided in EPA's rules — Detroit Edison would have projected that the Projects would have caused emissions to increase.¹⁸ EPA maintains that this retrospective "projection"

(Continued)

¹⁸ See EPA Mem. at 21-26. EPA's post-construction projections are irrelevant. But it is worth noting that the methodology offered by EPA's experts is inconsistent with Michigan's NSR rules. Specifically, EPA's experts' methodology is not based on "all relevant information" as required by the Michigan SIP. MICH. ADMIN. CODE R. 336.2801(II)(ii). Instead, these projections rely exclusively on the presumption that each hour of "availability" that the projects have "recovered" at Monroe Unit 2 would result in an hour of operation (and, thus, an hour's worth of emissions) following the Projects. See, e.g., EPA Mem. at 23-24 (arguing that "decreasing outage time leads to increased availability and increased availability leads to increased generation and pollution," and that the "additional, available hours recovered" by the Project "are clearly related to the project.").

But in promulgating the 2002 NSR rules, EPA did not establish a single permissible methodology for projecting future emissions. To the contrary, EPA did not even mention the methodology its experts use here and instead gave companies the authority to base projections on "all relevant factors," many of which can be controlled by the company after operations resume. See, e.g., 40 C.F.R. § 52.21(b)(41)(ii) (requiring consideration of "all relevant information, including but not limited to ... the company's own representations ... [and] expected business activity"). And having made a projection based on "all relevant information," EPA made clear that "[y]ou will not be required to obtain *any* kind of determination from the reviewing authority before proceeding with construction." 67 Fed. Reg. at 80,192 (emphasis added).

must control *regardless* of the company's own projection and *regardless* of the post-construction monitoring and reporting requirements of the Michigan NSR rules.

But that is not what the CAA or the Michigan NSR rules say. Under the Michigan NSR rules, actual post-project data provide the litmus test for pre-project projections and ultimately, the measure of whether a major modification has occurred. A "modification" is a "physical change in, or change in the method of operation of, a stationary source *which increases* the amount of any air pollutant *emitted* by such source or *which results in* the emission of any air pollutant not previously emitted." 42 U.S.C. § 7411(a)(4) (emphasis added). Under the plain terms of this definition, a "modification" therefore can occur only when emissions increase *in fact. See Envtl. Def. v. Duke Energy Corp.*, 549 U.S. 561, 569 (2007) ("The Act defines modification . . . as a physical change . . . that increases the amount of a pollutant discharged."); *see also* 57 Fed. Reg. at 32,325 ("NSR applies *only* where the emissions increase is *caused* by the change.") (emphases added). A "project is *not* a major modification if it *does not cause* a significant emissions increase." MICH. ADMIN. CODE R. 336.2802(4)(a)(ii) (emphases added).

The "projected actual" emissions test performed pre-project serves a different purpose.

That test is used to determine whether a "significant emissions increase . . . is *projected to***occur," not whether a "significant increase" and "major modification" in fact *has occurred. See

Moreover, EPA has made clear that it is *never* appropriate simply to *presume* (as does EPA's litigation-based projection methodology) that there will be an increase in emissions whenever a reliability improvement is undertaken. As EPA has explained, it "in no way intends to discourage . . . changes that increase efficiency or reliability or lower operating costs, or improve other operational characteristics of the unit," 57 Fed. Reg. at 32,327, and has specifically said that it "*declines to create a presumption* that every emissions increase that follows a change" is "inextricably linked to the . . . change." *Id.* (emphasis added).

MICH. ADMIN. CODE R. 336.2802(4)(c) (emphases added).¹⁹ As Michigan's rules make clear, actual data will dictate whether a major modification has occurred "regardless of preconstruction projections." MICH. ADMIN. CODE R. 336.2802(4)(b). At most, EPA's methodology might be used to support a claim that there was a "reasonable possibility" of an emissions increase, triggering notification and reporting under the Michigan NSR rules. But no such claim exists here because Detroit Edison has complied with the recordkeeping and reporting requirements, and there is no claim by EPA that Detroit Edison has violated the recordkeeping and reporting requirements of the Michigan SIP.

In other words, this Court need not officiate a "battle of experts" to conclude that Detroit Edison has not violated the Act. Detroit Edison complied with the 2002 NSR Reform Rules, as incorporated into the Michigan rules, by submitting its notification showing that the projects would not cause an emissions increase. The accuracy of that projection will be measured based on required emissions monitoring and annual reporting. No CAA § 113(b)(1) enforcement action against Detroit Edison may be maintained at this time.

CONCLUSION

For these reasons, Detroit Edison's motion for summary judgment should be granted. Respectfully submitted, this 9th day of June, 2011.

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¹⁹ See also 40 C.F.R. § 52.21(a)(2)(iv)(b) (stating that the "projected actual" test for projects at existing units serves as the "procedure for calculating (**before beginning actual construction**) whether a significant emissions increase . . . **will occur**." (emphases added)).

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CERTIFICATE OF SERVICE

I hereby certify that on June 9, 2011, the foregoing **DEFENDANTS' BRIEF IN SUPPORT OF MOTION FOR SUMMARY JUDGMENT BASED ON THE 2002 NSR REFORM RULES** was served electronically only on the following attorneys of record in accordance with an agreement reached among the parties:

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